

ATTACHMENT B
Amendments to the Claims

Please cancel claims 1-13 without prejudice or disclaimer.

This listing of claims will replace all prior versions, and listings, of claims in the application.

1-13. (Canceled)

14. (New) A device for determining vibration characteristics of substantially ellipsoid articles, said device comprising:

an elastic hammer with a handle having an arm portion, a hinge element and a handle with a ball head, said ball, said hinge element and handle end forming a hammer rod head for tapping and thereby acoustically vibrating the article;

a handle driving element for reciprocating the hammer generally in a plane around an axis passing through the handle adjacent the arm portion;

a microphone arranged adjacent to and directed to the article, to pick up acoustic vibrations generated by the article; and

a signal processor for processing the signals picked up by the microphone for determining vibration characteristics of the article.

15. (New) The device according to claim 14, wherein the plane passes through the long axis of the article.

16. (New) The device according to claim 14, wherein at least a single microphone is arranged in said plane, or through the long axis in a second plane substantially perpendicular to said plane.

17. (New) The device according to claim 14, wherein the hammer rod and the arm portion form a whole, with the hammer rod forming a leaf spring portion having a spring constant k in the range between 1.2 and 1.6 N/m.

18. (New) The device according to claim 14, wherein the handle driving element further comprises a holder with pin hole for a pin perpendicular to the first plane and through the arm portion, with an electromagnet attached to the holder for reciprocating the hammer generally in said plane, with the magnet included in the arm portion adjacent the electromagnet, and with a stop element for the arm portion during the forward movement.

19. (New) The device according to claim 18, wherein the handle driving element further comprises a stop for interrupting the backward movement of the hammer.

20. (New) The device according to claim 18, wherein the ball is made of steel, and the handle driving element further comprises a holding element with which the hammer is held after a backward movement, the holder element consisting of a stop block for the leaf spring portion and a holding magnet for the ball.

21. (New) The device according to claim 14, wherein the hammer rod is further coupled by means of a bistable switch with the arm portion, the switch having a first and a second snap position, and the hammer rod being movable either to the first snap position or the second snap position.

22. (New) The device according to claim 21, wherein the hammer rod in the forward movement is switched to the first snap position, and in the backward movement to the second snap position.

23. (New) The device according to claim 14, wherein the hinge element connection between the arm portion and the handle end is such that upon excitation of the handle driving element, a single tapping pulse is obtained.

24. (New) A method for determining vibration characteristics of vibrated articles, said method comprising:

tapping articles using a device according to claim 1.

25. (New) The method according to claim 24, wherein said tapping consists of a single momentary tapping pulse.

26. (New) The method according to claim 24, wherein said method is used in a device for sorting eggs.

27. (New) The method according to claim 24, wherein the articles are tapped at least twice.

28. (New) A device for determining vibration characteristics of substantially ellipsoid articles, said device comprising:

an elastic hammer with a handle having an arm portion, a hinge element and a handle with a ball head, said ball, said hinge element and handle end forming a hammer rod head for tapping and thereby acoustically vibrating the article;

a handle driving element for reciprocating the hammer generally in a plane around an axis passing through the handle adjacent the arm portion, said handle driving element comprising a holder with pin hole for a pin perpendicular to the first plane and through the arm portion, with an electromagnet attached to the holder for reciprocating the hammer generally in said plane, with the magnet included in the arm portion adjacent the electromagnet, and with a stop element for the arm portion during the forward movement;

a microphone arranged adjacent to and directed to the article, to pick up acoustic vibrations generated by the article; and

a signal processor for processing the signals picked up by the microphone for determining vibration characteristics of the article.

29. (New) The device according to claim 28, wherein the handle driving element further comprises a stop for interrupting the backward movement of the hammer.

30. (New) The device according to claim 28, wherein the ball is made of steel, and the handle driving element further comprises a holding element with which the hammer is held after a backward movement, the holder element consisting of a stop block for the leaf spring portion and a holding magnet for the ball.